Dairy Situation

Economics, Statistics, and Cooperatives Service

U.S. Department of Agriculture

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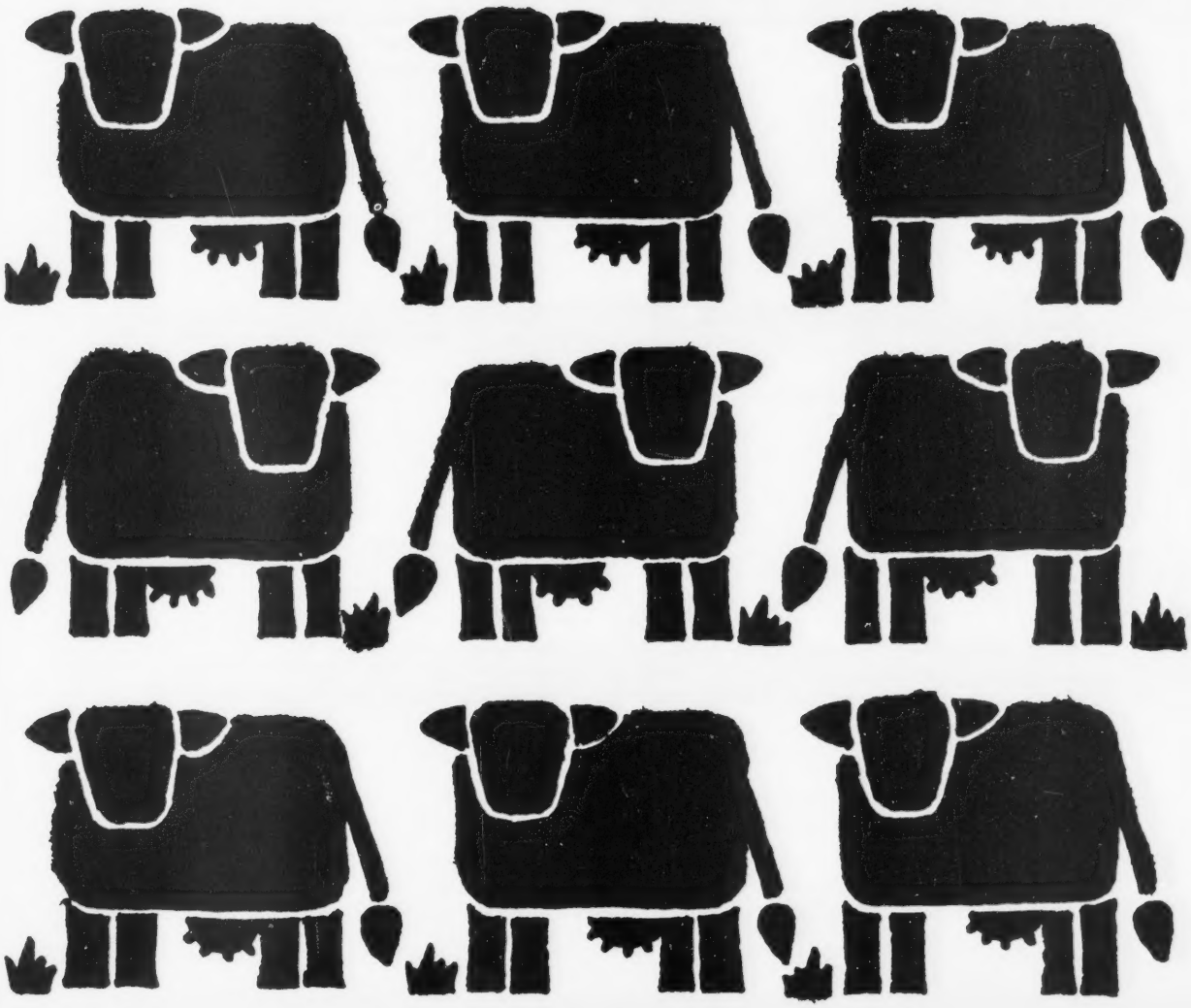
Approved by the World Food and Agricultural Outlook and Situation Board



U.S. Milk Production by Months

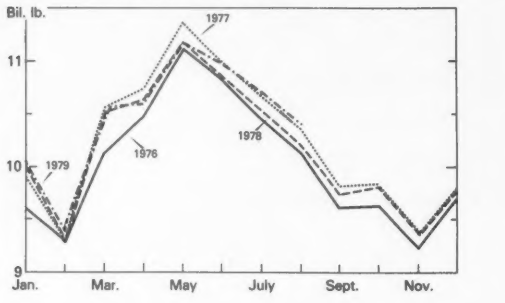


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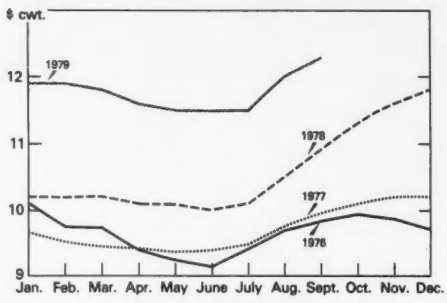
Figure 1

Milk Prices*



*U.S. average price received by farmers for deliveries to plants and dealers.

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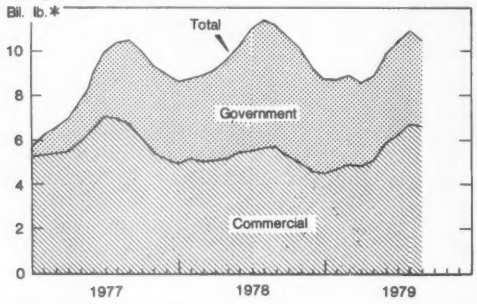
Figure 2

Dairy Product Stocks○



○As of first of month. *Milk equivalent, fat-solids basis.

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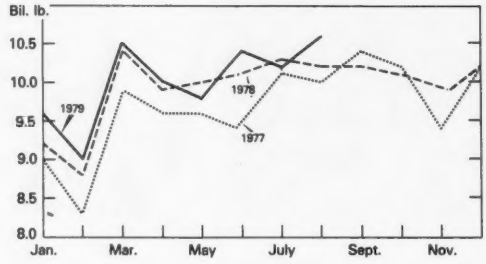
Figure 3

Commercial Disappearance of Milk in All Products*



*Milk equivalent.

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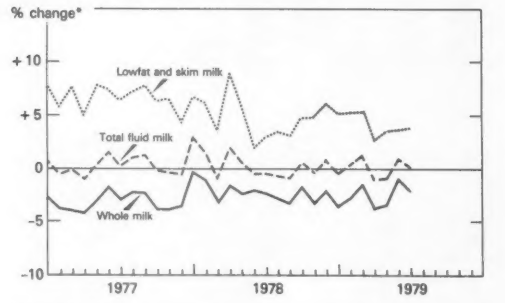
Figure 4

Daily Average Sales of Fluid Milk Items



*From year earlier, adjusted for calendar composition.

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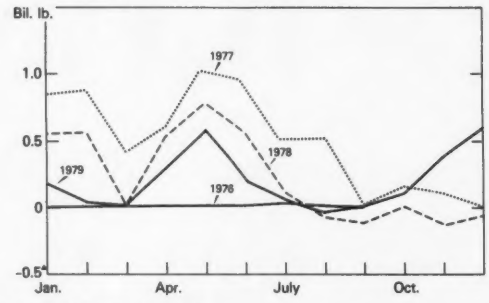
Figure 5

USDA Dairy Product Purchases*



*Net removals, milk equivalent, fat-solids basis.
△Negative figures denote domestic sales exceeded purchases.

USDA

Neg. ESCS 8449-79 (10)

Figure 6

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Approved by the World Food and Agriculture Outlook and Situation Board.

SUMMARY

Milk production moved above a year earlier this summer as increased output per cow outweighed slowly declining cow numbers. Production for the year likely will be about 1 percent above 1978's 122 billion pounds. Although this increased production and relatively large levels of commercial stocks will result in increased supplies, continuing strong demand for dairy products likely will result in milk prices remaining above the new (October 1) support level for the rest of the year. However, the increased production probably will slow year-to-year price increases in coming months. Recent price rises were partially in anticipation of the higher support price on October 1 and partially in response to the seasonal production declines.

Milk output in August was up about 2 percent from last year as output per cow showed a substantial increase from the relatively weak year-earlier level. Milk cow numbers dropped at a less-than-1-percent rate, comparable to the slow rates of decline during the 1975-77 period. Much of the increase in total production occurred in Wisconsin, where pasture conditions have been near ideal for producing milk, and in California where cow numbers are increasing and output per cow is recovering from very weak levels last year.

The *Dairy Situation* is published in March, May,
July,
October, and December.

Milk production this fall likely will continue to exceed the strengthening output of late 1978, but by a smaller amount than the increase of recent months. Output early next year probably will continue above year-earlier levels with first-half 1980 production up about 1 percent. However, weather developments or market forces could alter this outlook. Higher milk prices probably will be more than offset by higher feed prices. Nevertheless, milk-feed price relationships still should be favorable to dairy farmers, but not as favorable as in early 1979.

By late September, wholesale butter and cheese prices were up substantially as American cheese and butter prices each had risen about 10 cents a pound since spring. Wholesale dry milk and edible whey product prices have also strengthened.

Farmers received an average $12.30 per 100 pounds of milk in September, up 13 percent from a year earlier and 7 percent from the spring low. Manufacturing grade milk prices were well above the April-September support price and only about 6 cents below the support price which became effective on October 1. While a large proportion of the expected seasonal rise in manufacturing grade milk prices has already occurred, the average price for all milk will rise further in coming months, as the higher prices for manufacturing grade milk are reflected in milk for fluid use. Farm milk prices this fall likely will average more than a tenth higher than a year ago.

The support price for manufacturing grade milk in the 1979/80 marketing year is 80 percent of parity or $11.22 for milk with 3.5 percent milkfat ($11.49 per 100 pounds at average fat test). This price must be adjusted on April 1 to reflect the estimated change in the index of prices paid by farmers.

Cash receipts from dairying in 1979 could exceed $14½ billion, up from $12.7 billion in 1978. Thus far in 1979, the net income picture for dairymen has probably been slightly better than the relatively favorable 1978 conditions—but it could be less favorable this fall and during the first half of 1980 unless farm milk prices stay stronger than expected or feed prices weaken.

Retail dairy prices in August were about 12 percent above a year ago, slightly more than the price rises of all food products. Increased milk production and relatively large commercial stocks of manufactured dairy products probably will slow year-to-year retail price increases in coming months.

Milk supplies available for manufacturing this summer were well above the relatively low levels of a year earlier. Consequently, summer output of both cheese and butter showed strong increases.

Commercial use of milk and dairy products in July-August was up over 1 percent from a year ago. If, as expected, sales during September-December match last year's levels, total commercial use in 1979 would exceed 120 billion pounds, topping last year's record by about 1 percent.

Industry holdings of dairy products appeared adequate on September 1, as stocks of both milkfat and solids-not-fat were up substantially from last year's very low levels. In contrast to last year, the need to rebuild stocks will not be a source of strength in wholesale prices.

USDA purchases of butter and cheese under the price support program practically ceased this summer and small amounts of butter were sold back to the industry. For the marketing year just concluded, the Commodity Credit Corporation (CCC) removed from the commercial market about 1 percent of the market supply of milkfat and about 2 percent of the milk solids-not-fat, roughly one-third and two-thirds respectively, of the relatively low removals of a year earlier.

Imports of cheese and other dairy products in July-August were larger than a year ago. However, for the first 8 months of 1979, total cheese imports were down slightly. Commercial dairy product exports were smaller this summer as were food-aid exports and shipments to U.S. territories.

Increased milk production in the European Community (EC), the United States, and Oceania is expected to outweigh a substantial decline in production in the Soviet Union. This will result in slightly higher world milk production in 1979 than in 1978.

DAIRY SITUATION

SITUATION AND OUTLOOK

PRODUCTION

Milk Output Moves Above a Year Earlier

Milk production began to increase in June following 9 consecutive months of production near year-earlier levels. July-August milk output posted a 1¾-percent increase from the relatively weak 1978 levels. Increased output per cow, along with continued small declines in cow numbers, shaped the increase.

U.S. milk production

Month	1978	1979	Change
	Million pounds		*Percent*
January	9,994	10,035	+0.4
February	9,287	9,379	+1.0
March	10,523	10,555	+.3
April	10,631	10,609	-.2
May	11,178	11,175	0
June	10,851	10,982	+1.2
July	10,534	10,705	+1.6
August	10,213	10,400	+1.8
September	9,733		
October	9,832		
November	9,364		
December	9,788		
Total	121,928		

Output per cow during June-August showed substantial increases over the relatively small changes of a year earlier. Nearly three-fourths of the States reporting monthly posted higher production per cow than in August 1978. The major impacts on total production, however, took place in Wisconsin, where pasture and weather conditions have reportedly been ideal for producing milk, and in California where cow numbers are increasing and output per cow is recovering from very weak levels last year.

Monthly declines in milk cow numbers from a year earlier have shown little variability thus far in 1979—ranging only from 0.7 percent to 0.9 percent—despite higher cull cow prices. These rates compared with declines of from 1.0 percent to 1.4 percent in 1978, and were comparable to the declines of the 1975-77 period. Apparently the major adjustments (in culling and dispersals) resulting from the high cull cow prices were made last year. Another important factor in these smaller declines is probably the prospect for less favorable off-farm employment opportunities.

Milk cows and replacements, 1976-79

Date	Milk cows	Replacement heifers, 500 pounds and over	
		Number	Per 100 cows
	1,000		*Number*
1976			
January 1	11,087	3,958	35.7
July 1	11,058	3,942	35.6
1977			
January 1	11,035	3,888	35.2
July 1	10,977	4,005	36.5
1978			
January 1	10,939	3,896	35.6
July 1	10,823	3,957	36.6
1979			
January 1	10,853	3,936	36.3
July 1	10,736	4,117	38.3

Even though total production in August was up almost 2 percent, fewer than half of the reporting States produced more milk than a year ago. Regionally, the pattern was varied, ranging from gains of almost 6 percent in the Pacific region and about 3½ percent in the Lake States to declines of over 1 percent in the Plains region and nearly 2 percent in the Delta region. Of the 5 major dairy States, Wisconsin, California, and New York had significantly larger output, while production in Minnesota and Pennsylvania was about the same.

Production Increases To Continue Into Early 1980

Milk production this fall likely will continue to exceed the strengthening output of late 1978—but by a smaller amount than the increases of recent months. In early 1980, output probably will continue above the weakening levels of a year earlier. It now appears likely that first-half 1980 milk production will be up about 1 percent. However, it is still early and weather developments or market forces could alter this outlook.

Farm milk prices during the rest of 1979 and the first half of 1980 probably will average about a

tenth higher than a year earlier. These prices, combined with higher feed prices than a year earlier would lead to continued favorable milk-feed price relationships. Although increases in returns over concentrate costs will not be as great as those of a year earlier, these estimates assume somewhat higher concentrate feeding and a continuation of substantial increases in output per cow.

Favorable feeding relationships in the coming months probably will continue to moderate declines in milk cow numbers. Also, as the general economy remains weak and unemployment increases, off-farm employment opportunities likely will not be as good as in the recent past. Conversely, still-high slaughter cow prices and somewhat higher feed prices likely will maintain pressures for declines in cow numbers.

Utility cow prices, Omaha

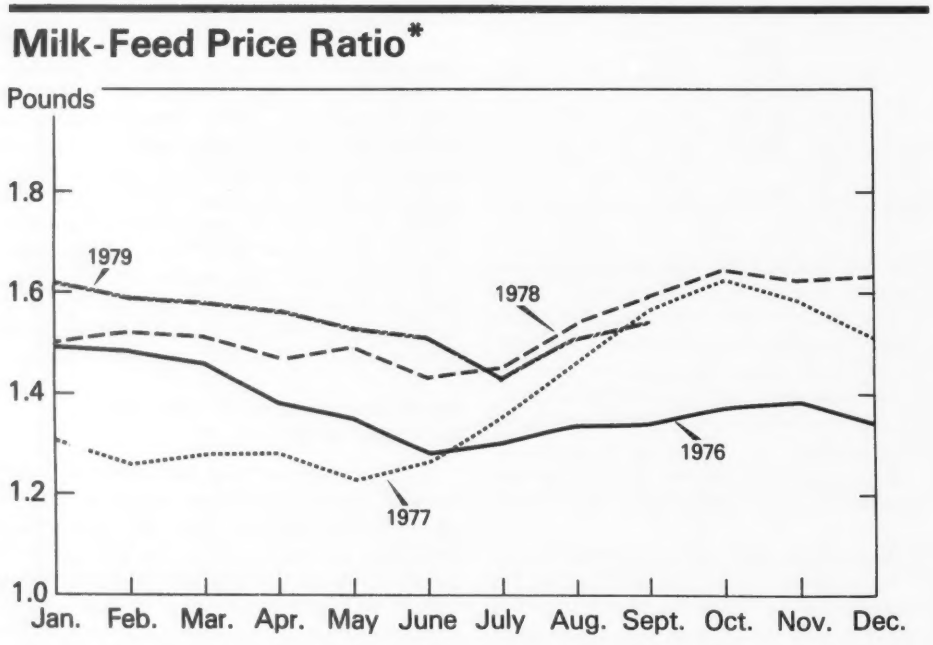
Month	1977	1978	1979
	Dollars per cwt.		
January	22.95	27.59	47.33
February	23.88	29.45	50.81
March	26.67	32.44	52.94
April	27.63	36.94	57.00
May	26.57	39.21	55.51
June	25.64	37.61	50.60
July	25.23	38.09	47.80
August	25.38	37.85	48.33
September	26.12	39.75	49.65
October	24.89	40.46	
November	23.80	39.30	
December	25.02	41.85	
Average	25.32	36.71	

Feed Prices Remain Higher

Although down slightly from July levels, feed prices have remained well above year-earlier levels—despite prospects for record large corn and soybean harvests this fall. By early October, corn prices at Chicago (No. 2 yellow) were quoted around $2.85 per bushel, up about 64 cents from a year earlier, while soybean meal at Decatur (44 percent protein) was about $195-$200 per ton, up about $30.

The price of 16-percent dairy ration averaged $160 per ton in September, down $2 from the July peak but up $23 from a year ago.

As of September 1, both the corn and soybean crops were forecast at record levels this year. The corn crop would be up 3 percent from last year's record 7.1 billion bushels, reflecting prospects for a record-high average yield. The soybean harvest



*Pounds of 16% protein ration equal in value to one pound of milk sold to plants and dealers.

USDA

Figure 7

Neg. ESCS 40-79 (10)

was forecast about 18 percent above last year's 1.8 billion bushels. The size of both crops will depend on harvest conditions in coming weeks. Despite record harvests, strong world demand and increased domestic feed use are expected to keep feed prices relatively high.

On the roughage side, alfalfa hay output was forecast on August 1 to be down 3 percent from a year earlier. Increases of 3-4 percent were anticipated in California and Wisconsin but small declines were expected in Minnesota, Pennsylvania, and New York. Alfalfa hay prices in September were up about $14 per ton from last year's low level.

Pasture conditions have been fairly good this season in major dairy areas. On September 1, Midwestern dairy areas generally had much better than average conditions while conditions in the Northeast were average or slightly below average.

Milk-feed price ratio[1]

Month	1977	1978	1979
		Pounds	
January	1.31	1.50	1.61
February	1.26	1.52	1.59
March	1.28	1.51	1.58
April	1.28	1.47	1.56
May	1.23	1.49	1.53
June	1.26	1.43	1.51
July	1.35	1.45	1.43
August	1.46	1.54	1.50
September	1.56	1.59	1.54
October	1.62	1.64	
November	1.58	1.62	
December	1.51	1.63	
Average	1.39	1.53	

[1] Pounds of 16% protein ration equal in value to 1 pound of milk.

Even with the higher feed prices, milk prices well above a year ago have resulted in still favorable milk-feed price relationships (figure 7). In September, the milk-feed price ratio (based on the price of 16-percent dairy ration) stood at 1.54, down from 1.59 a year earlier. With the expected higher milk prices and feed prices, milk-feed price relationships probably will still be favorable through mid-1980. However, they likely will not be as favorable as in early 1979.

PRICES AND INCOME

Wholesale Prices Up

Wholesale butter and cheese prices rose sharply in late July and during August as milk production was declining seasonally. Wholesale butter prices in August reached the CCC sell-back level and about 3 million pounds were sold back to the industry. By late September, butter prices in Chicago and American cheese prices both had risen about 10 cents a pound (figure 8).

Dry product prices have also strengthened since spring. Nonfat dry milk prices increased about 2 cents through August and rose another 2 cents in September to about 82.5 cents per pound (high heat, Central States production area)—still 1.5 cents less than the new support purchase price. This price rise was partially in anticipation of the higher support price on October 1 and partially in response to the seasonal production declines. Edible dry whey prices by late September had also risen about 2 cents per pound from the July low, while dry buttermilk prices were up about 3 cents.

Evaporated milk sold for about $18.30 per case in September, up $2.04 from a year ago. Wholesale ice cream prices were 13 percent higher than a year earlier in August. Prices of both these products may edge upward in coming months.

Wholesale butter prices are already near the new support purchase price while block cheese prices are well above. However, barrel cheese prices are close to CCC purchase prices. The combination of increased milk production (relative to a year ago) and relatively large commercial stock levels likely will reduce the pressure for substantial price increases during the rest of the year. Wholesale American cheese prices will be at the level necessary to attract enough milk into cheese output to meet commercial needs.

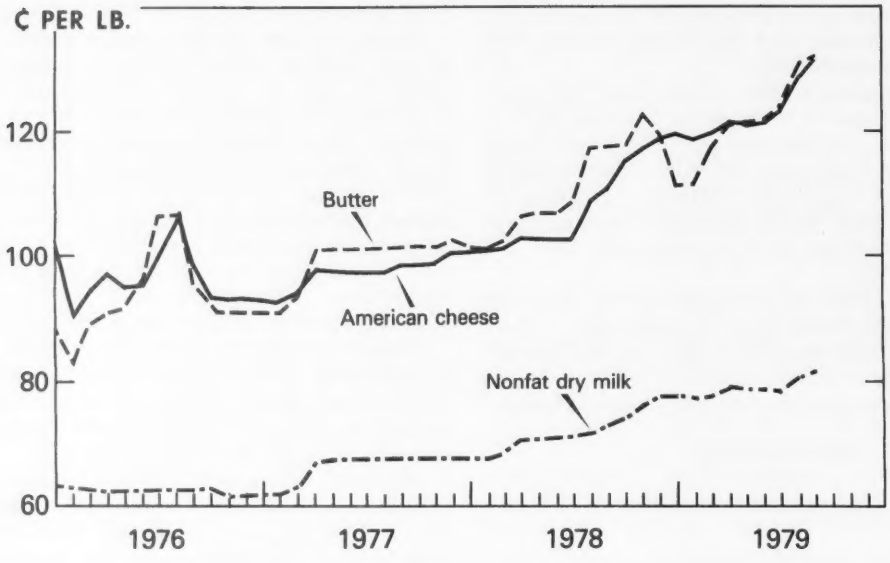
The October 1 increase in the Commodity Credit Corporation (CCC) sellback price for butter will allow further butter price rises in coming months. However, such increases are by no means assured. In fact, it is unlikely that the sellback level will be reached before yearend. Butter prices in coming months will be sensitive to changes in the overall supply-demand balance and wholesale cheese and nonfat dry milk prices. There may be further price rises as the peak holiday demand period approaches if butter sales hold. Conversely, if butter sales decline or overall commercial use of milk and dairy products weakens, prices could hold near the support purchase level and trigger purchases of butter and nonfat dry milk before yearend.

The Bureau of Labor Statistics (BLS) index of wholesale dairy prices stood at 215.2 (1967=100) in August, up 13 percent from a year ago and 3½ percent from May. Increases in wholesale prices of fluid milk products and any further rises in manufactured product prices will push this index higher in coming months.

Farm Milk Prices Rising

Farm milk prices have begun to reflect the higher wholesale dairy product prices.

Wholesale Dairy Product Prices



USDA

Figure 8

Neg. ESCS 39-79(10)

Manufacturing grade milk prices averaged $11.40 per 100 pounds in September, up 14 percent from a year earlier and 6½ percent from the April seasonal low. After adjusting for fat test, the September level was 67 cents above the support price for April-September and only 6 cents below the support price which became effective on October 1. A large proportion of the total seasonal price rise has already occurred, but seasonally rising fat content plus possible further increases in wholesale prices will push manufacturing grade milk prices higher in coming months and prices likely will remain above the new support level for the rest of the year.

Farmers received an average $12.30 per 100 pounds of milk in September, up 13 percent from a year earlier and 7 percent from the spring low. Since increases in wholesale product prices were largely not reflected in September prices of milk for fluid use, the average price of all milk will rise further in coming months. Farm milk prices this autumn likely will average more than a tenth higher than a year ago.

Minimum Class I prices in Federal order markets will average about $13.19 per 100 pounds in October, up $1.41 from a year earlier.

Milk prices received by farmers

Month	All sold to plants			Manufacturing grade		
	1977	1978	1979	1977	1978	1979
	Dollars per 100 pounds					
January. . .	9.65	10.20	11.90	8.48	9.17	10.90
February . .	9.53	10.20	11.90	8.41	9.21	10.80
March. . . .	9.45	10.20	11.80	8.46	9.27	10,80
April	9.44	10.10	11.60	8.66	9.30	10.70
May.	9.37	10.10	11.50	8.62	9.26	10.80
June	9.40	10.00	11.50	8.56	9.24	10.80
July.	9.49	10.10	11.60	8.56	9.28	10.80
August . . .	9.66	10.50	12.00	8.64	9.62	11.10
September .	9.97	10.90	12.30	8.84	9.96	11.40
October . .	10.10	11.30		9.02	10.50	
November .	10.20	11.60		9.11	10.80	
December .	10.20	11.80		9.19	10.90	
Average .	9.72	10.58		8.71	9.71	

During August, a number of cooperative associations announced increases in their negotiated Class I prices charged to handlers. These were the first significant increases in announced Class I prices since late January and early February. These increases raised the estimated average over-order payment to $0.65 per hundredweight in August or about 5 percent of the average Federal

order Class I price. This was up from the July average of $0.42. During September, over-order payments averaged $0.66, the highest level since September 1975, but less than the peak level of over $1.00 in the fall of 1974. The factors which appeared to be associated with the increases included the time lag between increases in manufacturing milk values and minimum Federal order Class I prices, indications at that time that milk would be in relatively short supply in certain areas this fall, and increased costs of supplementary milk supplies due to rapidly escalating transportation costs.

Some cooperatives have announced further increases in their negotiated prices for October. This follows a $0.22 increase in Federal order minimum Class I prices from September to October.

80 Percent Support Price Set

The support price for manufacturing grade milk for the marketing year which began on October 1 was set at 80 percent of parity, or $11.22 per 100 pounds for milk containing 3.5 percent fat (tables 1 and 3). The equivalent price for milk containing 3.67 percent milkfat, the national average test, is $11.49. Under the Food and Agriculture Act of 1977, the provision requiring semi-annual adjustment of the parity price remains in effect. The minimum level on April 1 will be the $11.22 price, adjusted to reflect the estimated change in the index of prices paid by farmers during the first half of the marketing year. However, the minimum level probably will be somewhat less than 80 percent of the April 1 parity equivalent price. Since only the index of prices paid is taken into account in the adjustment, the January changes in the adjusted base price and the ratio of manufacturing grade milk prices to all milk prices (both tend to push the parity equivalent price upward) will not be reflected.

In order to effect a support price of $11.22 per 100 pounds of manufacturing grade milk, the support purchase price for butter was raised 10 cents per pound to $1.34 in New York ($1.3133 in Chicago) while the purchase price for nonfat dry milk was raised 5 cents per pound to $0.84 (table 2). The increase in the milk price was split about evenly between the two products. The support purchase prices for cheese were raised 8 cents to $1.24 per pound for 40-pound blocks and $1.21 per pound for 500-pound barrels.

Effective on October 1, the manufacturing margins used in calculation of CCC purchase prices were increased 10 cents per hundredweight, reflecting higher processing costs, especially for energy. Also, the CCC will continue to sell back accumulated stocks for unrestricted use at 105 percent of the new CCC purchase prices. The value of whey solids-not-fat used in the calculation of the CCC cheese purchase price was reduced to zero (reflecting low whey product prices) from 2 cents per hundredweight. The differential paid for vitamin fortified nonfat dry milk was set at 1.25 cents per pound, down from 1.5 cents. Also, USDA will discontinue purchasing fortified nonfat dry milk after December 31, 1979 until further notice.

Cash Receipts Higher

Cash receipts to dairy producers were up about 15 percent for the third quarter of 1979 compared to a year ago. Sharply increased prices along with expanded marketings contributed to the boost. The year-to-year rise in cash receipts during the third quarter follows similar increases in the first half of 1979. With both higher prices and larger marketings, cash receipts for all of 1979 could exceed $14½ billion, up from $12.7 billion in 1978.

For the July-September quarter, the index of prices paid for production items increased about 15 percent from last year, matching the gains in cash receipts. This index was boosted by the sharp year-to-year rises in prices of fuels and energy and substantial increases in the prices of feed and feeder livestock. Net incomes to dairy producers during the summer, though, at least matched those of the favorable conditions of 1978. With expected slower increases in milk prices and continued increases in the cost of production items, net income for dairymen this autumn and during the first half of 1980 may not match that of a year earlier—but it will remain favorable.

Retail Price Increases to Moderate

Retail prices of milk and dairy products continued to rise during the summer, reflecting the

Retail dairy product prices

Item	Index base	Aug. 1978	Dec. 1978	Mar. 1979	Aug. 1979
Consumer Price Index[1]	1967=100	197.7	202.9	209.1	221.1
All food[1]	1967=100	215.4	219.4	230.4	236.3
All dairy products[1]	1967=100	186.1	196.4	201.5	208.6
Fluid milk and cream	12/77=100	105.1	110.6	113.8	117.7
Whole milk	1967=100	172.1	181.2	186.5	192.8
Other	12/77=100	105.1	110.4	113.6	117.4
Manufactured dairy products	12/77=100	105.3	111.5	114.0	118.2
Butter	1967=100	180.7	195.4	194.5	203.0
Cheese	12/77=100	104.8	111.7	114.6	118.4
Frozen desserts	12/77=100	105.5	109.9	113.4	117.8
Other	12/77=100	105.1	109.3	111.0	115.4

[1] For all urban consumers starting January 1978.

Table 1 --Manufacturing milk: Comparisons of announced support prices and U.S. average market prices paid to producers, marketing years, 1960-79 1/

Marketing year beginning in: 2/	Date effective 3/	Manufacturing milk				
		Support level		Average market level		
		Percentage of parity equivalent 4/	Price per 100 pounds	Price per 100 pounds	As a percentage of parity equivalent: In month prior to marketing year	As a percentage of parity equivalent: Average during marketing year
		Percent	- - Dollars - -		- - Percent - -	
1960		76	3.06			
	9/17/60	80	3.22			
	3/10/61	85	3.40	3.31	83	83
1961		83	3.40	3.38	83	82
1962 5/		75	3.11	3.19	76	76
1963		75	3.14	3.24	77	77
1964		75	3.15	3.30	77	78
1965		75	3.24	3.45	80	79
1966		78	3.50			
	6/30/66	89.5	4.00	4.11	92	90
1967		87	4.00	4.07	88	87
1968		89.4	4.28	4.30	90	87
1969		83	4.28	4.55	88	86
1970		85	4.66	4.76	87	85
1971		85	4.93	4.91	85	82
1972		79	4.93	5.22	84	80
1973	3/15/73	75	5.29			
	8/10/73	80	5.61	6.95	99	91
1974		81	6.57			
	1/04/75	89	7.24	6.87	85	78
1975		79	7.24			
	10/02/75	84	7.71	8.12	89	84
1976		80	8.13			
	10/01/76	81	8.26	8.52	84	82
1977 6/		82	9.00	7/8.77	80	80
1977		82	9.00			
	4/1/78	86	9.43	9.30	85	79
1978		80	9.87			
	4/1/79	87	10.76	10.86	88	80
1979		80	11.49			

1/ See DS-372, October 1978, table 1 for 1949-59. 2/ Start of marketing year April 1, 1960-77, October 1, 1977 to present. 3/ If other than start of year. 4/ Except as noted, this is the actual percentage of the parity equivalent price published in month before the marketing year. In some cases the announced percentages, based on forward estimates of parity, were slightly different. 5/ Beginning November 1962, parity equivalent is based on prices for all manufacturing grade milk instead of the "3-product" price for American cheese, evaporated milk, and the butter-nonfat dry milk combination used before. 6/ April-September transition period. 7/ Adjusted to annual average fat test.

Table 2 --Dairy products under price support programs, USDA purchase price per pound, 1970-79 1/

Effective date of change	Butter		Nonfat dry milk, extra grade	Natural Cheddar cheese, Grade A or higher
	Grade A or higher			
	Chicago	New York	Spray	
	Cents			
4/01/70	2/69.846	70.75	27.20	52.00
4/01/71	67.784	68.75	31.70	54.75
4/01/72	67.708	68.75	31.70	54.75
4/15/73	60.922	62.00	37.50	62.00
8/10/73	60.922	62.00	41.40	65.00
4/01/74	60.570	62.00	56.60	70.75
1/04/75	68.070	69.50	60.60	77.25
4/01/75	69.193	70.75	60.60	79.25
10/2/75	79.693	81.25	62.40	85.00
4/01/76	85.817	87.75	62.40	90.50
10/01/76	90.817	92.75	62.40	92.50
4/01/77 4/	100.710	102.75	68.00	3/98.00
4/01/78	106.710	108.75	71.00	3/103.25
10/01/78	111.300	113.50	73.75	3/106.00
4/01/79	121.800	124.00	79.00	3/116.00
10/01/79	131.330	134.00	84.00	3/124.00

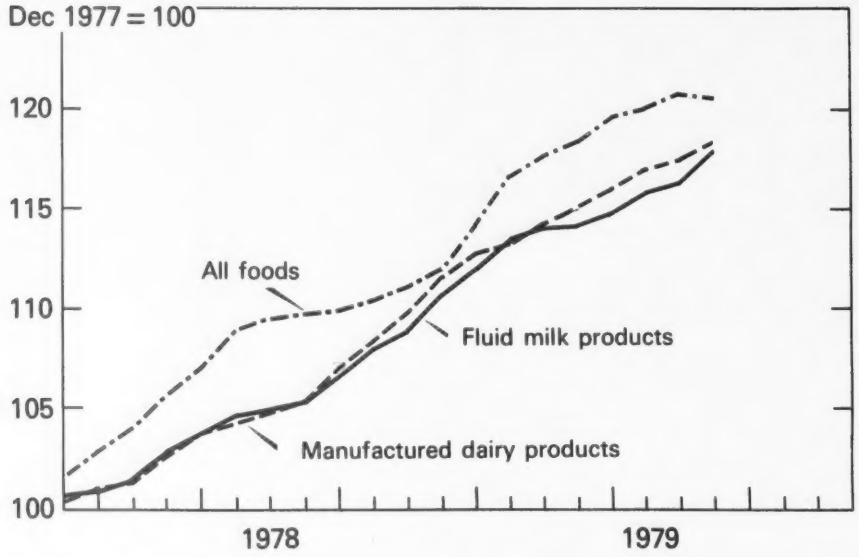
1/ Prices for bulk containers--butter, 64 and 68-pound packages; nonfat dry milk, nonfortified in 50-pound bags; and cheese, mostly in 40 and 60-pound blocks. See DS-325, May 1969, table 6 for 1949-61 data and DS-372, October 1978 table 2 for 1962-69. 2/ Prices varied slightly during the year due to changes in freight rates. 3/ 3 cents less for barrel cheese. 4/ Remain in effect at the start of the marketing year beginning 10/1/77.

Table 3 --Computations of parity equivalents for manufacturing milk, per 100 pounds, marketing years, 1970-79 1/

Marketing year beginning in: 2/	Base period 3/			Adjusted base price 6/	Parity 4/		
	All milk wholesale	Manufacturing grade milk 5/	Ratio		Index (1910-14=100)	Prices	
						All milk wholesale	Equivalent of manufacturing milk
	- - Dollars - -		Percent	Dollars		- - - Dollars - - -	
1970	4.57	3.65	79.9	1.78	386	6.87	5.49
1971	4.73	3.79	80.3	1.79	405	7.21	5.79
1972	4.89	3.94	80.6	1.82	423	7.70	6.21
1973	5.09	4.13	81.1	1.83	473	8.64	7.01
1974	5.39	4.43	82.2	1.80	549	9.88	8.12
1975	5.81	4.83	83.1	1.80	612	11.00	9.14
1976	6.26	5.26	84.0	1.82	664	12.10	10.16
1977 7/	6.75	5.72	84.7	1.88	685	12.90	10.93
1978	7.22	6.18	85.6	1.90	756	14.40	12.33
1979	7.74	6.73	87.0	1.91	862	16.50	14.36

1/ See DS-325, May 1969, table 7 for 1948-61 and DS-372, October 1978 table 3 for 1962-69. 2/ Marketing year began on April 1 until shifted to October 1 in 1977. 3/ For the 10 calendar years immediately preceding. 4/ From issues of Agricultural Prices immediately preceding start of marketing year. 5/ Prior to November 1962, the "3-product" price series was used. 6/ 120-month average of farm prices for all wholesale milk divided by 120-month average of the Index of Prices Received by Farmers (both adjusted for supplemental payments), ending with December of previous year. Actual price received during 1910-14 was $1.61. 7/ Computations were identical on both April 1 and October 1.

Retail Food And Dairy Product Prices



USDA

Figure 9

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increased farm and wholesale prices and continued strong commercial use of dairy products. The BLS index of retail dairy prices equalled 208.6 (1967=100) in August, up 12 percent from a year earlier and up about 3½ percent from March (figure 9). Meanwhile, the index of retail prices for all food was up about 10 percent from a year earlier.

Expected higher milk production from a year earlier and adequate commercial stocks of manufactured dairy products will probably limit year-to-year increases in retail dairy prices during the second half of 1979. However, some additional seasonal increases in retail prices can be expected as milk production reaches its yearly low and holiday demand for dairy products picks up.

During the first half of 1979, retail prices of fluid milk products and manufactured dairy products increased by similar percentages. Manufactured dairy products probably will have shown most of their seasonal rise by early in the fourth quarter, while prices of fluid milk products, will not have completed the bulk of their seasonal rises until late fall.

Over $29 Billion Spent For Dairy Products in 1978

Consumer expenditures for dairy products in 1978 totaled $29.6 billion, up 8 percent from 1977 (table 4). Consumers purchased $13.6 billion of fluid products and $16.0 billion of manufactured products. With only a small increase in consumption of dairy products in 1978, the increase in consumer expenditures was due primarily to sharply higher retail prices, and to a small extent by an increased proportion of dairy products consumed away from home. Dairymen received about $12.7 billion last year, about the same proportion of the consumer's dollar as a year before.

A 12-percent rise in disposable personal income and a 9-percent increase in wages was matched by a similar increase in retail dairy prices. As a result, it took the average wage earner about 68 minutes a week to earn the money for the dairy products in the market basket of farm foods in 1978, down from the 69 minutes it took in 1977, and 73 minutes

Item	Consumer expenditures for dairy products	
	1977	1978
	Billion dollars	
At-home	18.5	19.9
Away-from-home	8.9	9.7
Public eating places	6.6	7.2
Institutions	2.3	2.5
Total	27.4	29.6

Table 4 --Consumer expenditures for food and dairy products, income, and labor required to purchase specified dairy products, selected years, 1950-78

Year	Consumer expenditures			Disposable personal income	Hourly wage rate 2/
	For all foods 1/	For dairy products			
		Amount	Percentage of all food		
	Billion dollars	Million dollars	Percent	Billion dollars	Dollars
1950	46.0	8,157	17.7	205.4	1.44
1955	58.1	10,301	17.7	273.3	1.86
1960	70.5	12,098	17.2	349.4	2.26
1965	85.8	13,049	15.2	472.2	2.61
1970	118.6	16,106	13.6	685.9	3.35
1971	122.0	16,698	13.7	742.8	3.57
1972	130.6	17,663	13.5	801.3	3.82
1973	146.8	18,919	12.9	901.7	4.09
1974	166.9	21,285	12.8	984.6	4.42
1975	184.7	22,706	12.3	1,086.7	4.83
1976	200.2	25,993	13.1	1,184.5	5.22
1977	217.9	27,389	12.6	1,305.1	5.68
1978 3/	240.7	29,564	12.3	1,458.4	6.17

Year	Time worked to earn money to purchase 5/				
	Butter, 1-lb.	Milk at stores, ½-gal.	American cheese, ½-lb.	Ice cream, ½-gal.	Evaporated milk, 14½-oz. can
	Minutes				
1950	29.6	15.8	11.7	6/35.6	5.1
1955	22.5	13.8	10.2	26.6	4.3
1960	19.5	12.8	9.0	22.2	4.1
1965	17.3	10.9	8.7	18.1	3.5
1970	15.5	10.3	9.0	15.1	3.4
1971	14.7	9.9	8.9	14.4	3.3
1972	13.7	9.4	8.5	13.5	3.1
1973	13.4	9.6	8.9	13.3	3.3
1974	12.8	10.6	9.9	14.6	3.9
1975	12.7	9.8	9.5	15.2	3.8
1976	14.5	9.5	9.9	14.6	3.9
1977	14.1	8.9	9.4	14.3	3.8
1978 3/4/	14.1	8.6	9.3	14.2	3.8

1/ Excludes alcoholic beverages, food donated by the Government, non-personal spending for food, and institutional food use. 2/ Average of all manufacturing industries. 3/ Preliminary. 4/ Calculated using BLS retail price indexes. 5/ Based on hourly wage rates of all manufacturing industries. 6/ 1951.

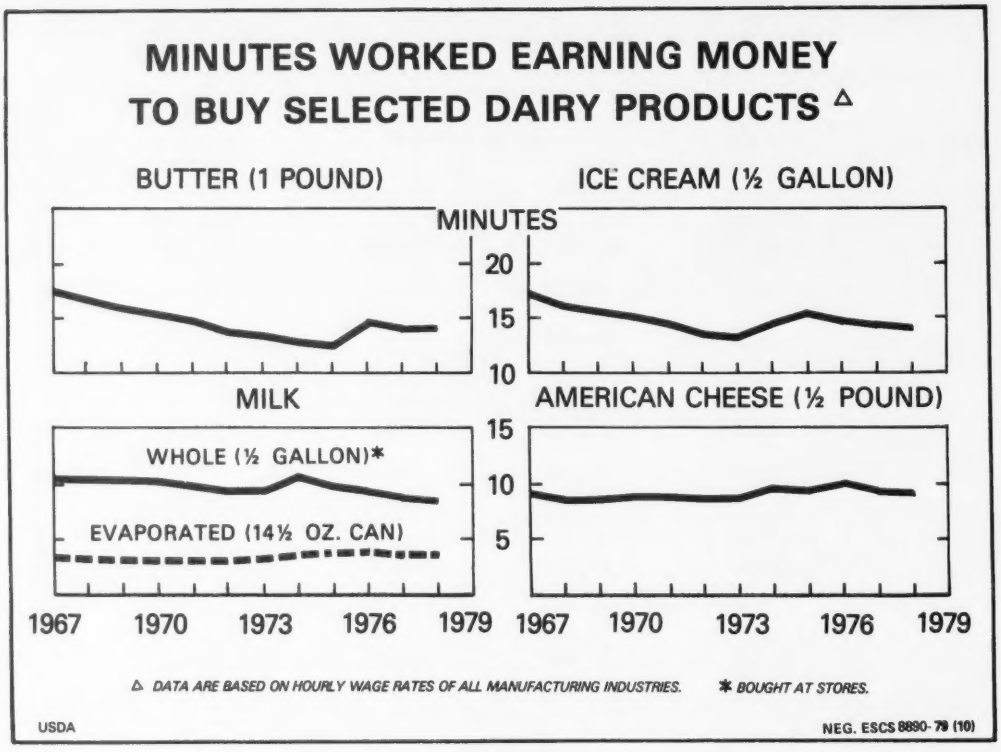

Figure 10

in 1976. For individual dairy products, though, there was considerable variation (figure 10).

Expenditures for dairy products consumed away from home rose slightly more than expenditures for home use. The proportion of consumer dairy expenditures which represents products eaten outside the home has risen in recent years, but still represents only about one-third of the total.

UTILIZATION

More Milk Available for Manufactured Dairy Products

Supplies of milk available for manufacturing this summer were well above the relatively low levels of a year earlier. Consequently, summer output of both cheese and butter have shown strong increases. American cheese production increased by about 9 percent in July followed by an increase of a tenth in August. Other-than-American varieties have posted similar gains. Cheese plants will continue to attract enough milk to keep the production levels consistent with desired stock levels and expected commercial use.

Even with the larger cheese production, the higher level of milk production means supplies remain adequate to allow for increased butter production. Butter output in August increased by about 3 percent, following a 5 percent increase in July. Preliminary estimates for September indicate a decrease of about 1 to 2 percent from last year's weak level. Nonfat dry milk output in August was up 4 percent from a year earlier, reversing a decline of about 3 percent in July.

Among other products, canned milk production

Production of selected manufactured dairy products, 1978-79

Item	January-August		Change from year earlier	
	1978	1979[1]	1978	1979[1]
	Million pounds		*Percent*	
Butter	715.6	688.7	-5.2	-3.8
Cheese:				
American	1,449.4	1,515.5	-.7	+4.6
Other	944.6	1,004.2	+9.7	+6.3
Cottage, creamed	599.5	582.6	-.4	-2.8
Canned milk	554.1	548.0	-1.6	-1.1
Dry whole milk	53.9	60.2	+5.3	+11.7
Ice cream (Mil. gal.)	569.5	572.0	+.4	+.4
Milk equivalent[2]	45,822	45,972	-1.8	+.3
Nonfat dry milk	716.2	664.1	-12.2	-7.3

[1] Preliminary. [2] Total all reported manufactured products.

in July-August was considerably below a year before, while dry whole milk was sharply higher. Output of dry whey and modified whey products for human use was up, although dry whey for animal use was down. Production of lactose and condensed whey for food and feed were all smaller.

Wisconsin out-of-state milk shipments

Month	1978		1979	
	Loads	Volume	Loads	Volume
	Number	*Thousand pounds*	*Number*	*Thousand pounds*
January	206	9,682	302	14,194
February	314	14,758	180	8,460
March	239	11,233	64	3,008
April	183	8,601	17	799
May	154	7,238	24	1,128
June	57	2,679	6	282
July	121	5,687	36	1,692
August	119	5,593	157	7,379
September	475	22,325	297	13,959
October	191	8,977		
November	276	12,972		
December	320	15,040		
Total	2,655	124,785		

The higher milk output has substantially increased supplies of milk available for manufacturing. The milk equivalent of all manufactured products was about 5 percent above a year earlier in July-August. The amount of milk for manufacturing probably will remain well above a year ago for the remainder of this year. This should result in continued increases in the production of both cheese and butter.

Little Change in Commercial Use

Little change in commercial use from year-earlier levels is expected for the rest of the year, after an increase of 1.5 percent for the first eight months of 1979. The seasonal increase in demand for milk products due to school openings and the holiday season will probably be moderated by increased retail prices and by overall sluggishness in the general economy.

The year-to-year increase in commercial use during the first six months of 1979 was buoyed by strong sales of other-than-American type cheeses, up 5.5 percent. Sales of butter and American cheese increased about 1.5 percent over the January to June period, while the commercial use of nonfat dry milk and canned milk declined significantly.

For the summer, July-August butter utilization posted a gain of about 5½ percent to the highest level since 1975 and nonfat dry milk use rebounded from the abnormally low level of 1978 (table 6). Commercial disappearance of other-than-American cheeses increased by 6 percent from last year's

Changes in dairy sales from year earlier

Item	Change		
	Jan.-Mar.	Apr.-June	July-Aug.
	Percent		
Total milk[1]	+2.6	+0.6	+1.3
Manufactured products:			
American cheese	-1.8	+4.5	+3.8
Other cheese	+0.7	+10.2	+5.7
Cottage cheese[2]	-0.7	-3.1	-2.7
Butter	+9.7	-6.5	+5.6
Ice cream	+2.1	-0.8	+0.2
Ice milk	-4.2	-6.4	-3.8
Canned milk	-1.2	-10.6	+12.3
Nonfat dry milk	-3.9	-16.9	+4.3
Fluid products:	+0.5	-0.4	N.A.
Whole milk	-2.6	-2.8	N.A.
Skim and lowfat milk	+5.2	+3.4	N.A.
Cream and mixtures	0	-.2	N.A.

[1] On a milk equivalent, fat-solids basis. [2] Creamed and low-fat. N.A.-Not available.

strong levels, while Amercian cheese sales increased about 4 percent.

Commercial use of creamed cottage cheese and sales of ice milk and sherbet decreased from a year ago, while sales of ice cream and lowfat cottage cheese increased.

Total commercial disappearance of milk and dairy products in July-August was still over 1 percent above a year ago (table 5). If, as expected, sales during the last 4 months of 1979 match last year's levels, total commercial use in 1979 would exceed 120 billion pounds and would top last year's record by about 1 percent.

Commercial Stocks Up

Commercial stocks of dairy products continued to exceed the very tight holdings of a year ago on September 1. On a milk equivalent, fat solids basis, commercial stocks were up 15 percent over a year ago, and solids-not-fat holdings had increased 22 percent. Increased milk production and seasonal additions to stocks contributed to the increase in commercial holdings.

September 1 American cheese stocks increased 13 percent over last year's low levels, while stocks of other varieties of cheese were 24 percent more than in 1978.This was the twelfth consecutive month holdings of other-than-American cheeses achieved alltime highs. Such increases in industry stocks are consistent with the expanded usage of these cheeses in the last few years.

Commercial butter holdings were about a fourth higher than last year on September 1, despite strong commercial use. The increase in butter holdings primarily reflects the relatively low levels of a year ago, and to a lesser degree the increased milk production in July-August. September 1 holdings of

Table 5--Commercial disappearance: Total milk, annual and by quarters, 1977-79 1/

Item	1977	1978					1979 2/			
		By quarters				Annual	By quarters			Annual
		1st	2nd	3rd	4th		1st	2nd	July-Aug.	4th	
		Billion pounds									
Production	122.7	29.8	32.7	30.5	29.0	121.9	30.0	32.8	21.1		
Farm use	2.8	.7	.7	.7	.7	2.7	.6	.6	.4		
Marketings	119.9	29.1	32.0	29.8	28.3	119.2	29.4	32.2	20.7		
Beginning commercial stocks	5.3	4.9	5.1	5.6	5.3	4.9	4.5	4.9	6.3		
Imports	2.0	.5	.4	.5	.9	2.3	.4	.5	.4		
Total supply	127.1	34.5	37.5	35.9	34.5	126.4	34.2	37.6	27.4		
Ending commercial stocks	4.9	5.1	5.6	5.3	4.5	4.5	4.9	6.3	6.5		
Net removals	6.1	1.2	1.9	-.1	-.2	2.7	.2	1.1	4/		
Commercial disappearance Actual	116.1	28.4	30.0	30.7	30.2	119.3	29.1	30.2	20.9		
Percent change 3/	-.3	+4.4	+4.9	+.6	+1.2	+2.7	+2.6	+.6	+1.3		

1/ Milk equivalent, fat solids basis. Totals may not add due to rounding
2/ Preliminary.
3/ From year earlier using unrounded data.
4/ Less than 50,000 pounds.

Table 6--Commercial disappearance: Selected dairy products, United States, annual 1969-78, quarters, 1978-79

Year and quarter	Butter 1/	Cheese		Nonfat dry milk	Canned Milk	Frozen products 3/
		American 2/	Other			
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. gal.
1969	921.9	1,281.0	861.6	1,042.1	1,376.1	1,092.2
1970	898.2	1,398.0	909.1	983.2	1,213.8	1,097.3
1971	847.1	1,454.8	987.0	981.8	1,186.9	1,102.4
1972	885.4	1,595.7	1,127.8	919.2	1,102.6	1,108.6
1973	855.6	1,677.1	1,210.2	1,110.1	1,056.7	1,118.6
1974	929.9	1,780.6	1,276.5	809.9	999.5	1,128.0
1975	951.0	1,717.1	1,331.9	697.0	923.9	1,183.9
1976	919.0	1,920.9	1,458.0	719.2	899.0	1,154.0
1977	859.8	1,958.8	1,512.3	682.2	799.2	1,167.6
1978	903.5	2,064.7	1,655.1	658.4	776.1	1,170.4
1978 - 1st	225.4	527.7	388.5	177.9	196.7	249.2
2nd	217.7	518.7	388.2	135.2	179.7	333.8
3rd	222.3	497.7	405.5	190.3	163.6	346.3
4th	238.2	520.6	472.9	155.0	236.0	241.1
1979 - 1st	247.2	518.2	391.3	170.9	194.4	250.5
2nd	203.6	542.3	427.8	112.4	160.7	325.0
July-Aug.	146.2	346.4	290.4	135.2	120.1	241.7
4th						
	1978-79 percent change					
1st	+9.7	-1.8	+0.7	-3.9	-1.2	+.5
2nd	-6.5	+4.5	+10.2	-16.9	-10.6	-2.6
July-Aug.	+5.6	+3.8	+5.7	+4.3	+12.3	-1.1
4th						

1/ Imports include butter equivalent of butteroil. 2/ Imports include Colby cheese: stocks do not include processed cheese. 3/ Excludes Mellorine.

Table 7--Milk: Supply and utilization in all dairy products, United States, 1965-78 1/

Year	Supply					Utilization						
	Production	Imports	Beginning stocks: Commercial	Beginning stocks: Government	Total	Total use	Exports and shipments: Commercial 2/	Exports and shipments: USDA 3/	Exports and shipments: Total	Domestic disappearance: Fed to calves	Domestic disappearance: Food use: Military	Domestic disappearance: Food use: Civilian consumption: Total	Domestic disappearance: Food use: Civilian consumption: Per capita
	Million pounds												Pounds
1965	124,180	923	4,317	973	130,393	125,937	1,710	648	2,358	2,061	2,819	118,699	620
1966	119,912	2,791	3,918	538	127,159	122,300	907	301	1,208	1,980	2,376	116,736	604
1967	118,732	2,908	4,813	46	126,499	118,247	593	231	824	1,891	2,117	113,415	581
1968	117,225	1,780	4,258	3,994	127,257	120,550	814	957	1,771	1,821	3,295	113,663	577
1969	116,108	1,621	3,983	2,724	124,436	119,191	942	477	1,419	1,745	2,696	113,232	569
1970	117,007	1,874	3,798	1,447	124,126	118,323	949	41	990	1,702	2,419	113,212	562
1971	118,566	1,346	3,705	2,098	125,715	120,611	1,063	1,963	3,026	1,635	2,031	113,919	558
1972	120,025	1,694	3,565	1,539	126,823	121,325	1,263	884	2,147	1,624	1,671	115,883	561
1973	115,491	3,860	3,493	2,005	124,849	119,641	1,213	79	1,292	1,584	1,257	115,508	555
1974	115,586	2,923	4,732	476	123,717	117,831	1,133	25	1,158	1,558	1,137	113,978	544
1975	115,334	1,669	5,576	310	122,889	119,046	1,026	20	1,046	1,567	1,075	115,358	546
1976	120,269	1,943	3,719	124	126,055	120,346	1,004	23	1,027	1,562	1,013	116,744	548
1977	122,698	1,968	5,299	410	130,375	121,749	963	29	992	1,548	996	118,213	551
1978 4/	121,928	2,303	4,916	3,710	132,857	124,128	926	51	977	1,488	977	120,686	558

1/ Milk equivalent, fat solids basis. 2/ Includes sales for dollars and government-to-government sales. 3/ Includes P.L. 480 and Aid programs. 4/ Preliminary.

Table 8--Dairy products: Per capita civilian consumption, United States, 1965-78 1/

Year	Fluid milk and cream 2/: Sales of fluid products	Fluid milk and cream 2/: Total	Butter	Cheese: Whole and part skim milk 3/: American	Cheese: Whole and part skim milk 3/: Other	Cheese: Cottage cheese	Evaporated and condensed: Canned, whole milk	Evaporated and condensed: Bulk condensed, whole milk	Skim and butter-milk	Frozen products: Ice cream	Frozen products: Ice milk	Frozen products: Sherbet	Frozen products: Other frozen dairy products	Mellorine	Dry milk products: Dry whole milk	Dry milk products: Nonfat dry milk	Dry milk products: Dry butter-milk	Dry whey 4/
	Pounds																	
1965	272	290	6.4	6.2	3.4	4.6	8.6	2.1	5.0	18.5	6.6	1.5	0.2	1.3	0.3	5.6	0.4	0.6
1966	272	289	5.7	6.2	3.6	4.6	7.9	1.9	5.4	18.2	6.8	1.6	.2	1.3	.3	5.9	.3	.7
1967	265	280	5.5	6.4	3.7	4.5	7.3	1.7	5.0	17.8	7.0	1.5	.2	1.3	.3	5.6	.3	.9
1968	266	280	5.7	6.6	4.0	4.6	7.1	1.8	4.8	18.4	7.2	1.6	.2	1.4	.2	5.8	.3	1.1
1969	265	277	5.4	6.7	4.2	4.8	6.4	1.5	5.0	18.0	7.6	1.7	.2	1.3	.2	5.8	.3	1.2
1970	264	275	5.3	7.1	4.4	5.2	5.9	1.2	5.0	17.7	7.8	1.6	.2	1.2	.2	5.4	.2	1.5
1971	263	273	5.1	7.4	4.7	5.4	5.7	1.1	5.1	17.5	7.8	1.6	.2	1.1	.2	5.3	.3	1.6
1972	266	275	4.9	7.8	5.4	5.4	5.1	1.2	4.8	17.4	7.7	1.6	.3	1.1	.1	4.6	.2	1.8
1973	264	272	4.8	8.0	5.7	5.3	4.9	1.1	4.3	17.5	7.7	1.7	.3	.9	.1	5.3	.2	1.8
1974	256	264	4.6	8.6	6.0	4.7	4.4	1.2	3.5	17.5	7.8	1.6	.3	.8	.1	4.2	.2	2.2
1975	262	269	4.8	8.3	6.2	4.7	3.9	1.4	3.6	18.7	7.8	1.5	.3	.7	.1	3.3	.2	2.3
1976	260	266	4.4	9.1	6.8	4.8	3.7	1.3	3.7	18.1	7.4	1.5	.3	.5	.2	3.6	.2	2.5
1977	257	263	4.4	9.4	6.9	4.8	3.3	1.1	4.0	17.8	7.9	1.5	.3	.4	.2	3.4	.3	2.5
1978 5/	256	261	4.5	9.8	7.5	4.8	3.1	1.0	3.6	17.8	7.8	1.4	.4	.4	.3	3.2	.2	2.5

1/ See table 15, DS-332, for earlier years. 2/ Product pounds. 3/ Excludes cottage cheese. 4/ Includes modified dry whey products beginning 1975. 5/ Preliminary.

Table 9--Dairy products removed from the commercial market by programs of the U.S. Department of Agriculture, marketing years, 1965-78 1/

Marketing year beginning in: 2/	Removals 3/						Solids content of removals			
	Butter 4/	Cheddar cheese	Dry whole milk	Evaporated milk	Nonfat dry milk 5/	Milk equivalent	Milkfat	Solids-not-fat	As a percentage of marketings: Milkfat	As a percentage of marketings: Solids-not-fat
	Million pounds					Bil. lb.	Million pounds		Percent	
1965	126.3	21.2	---	---	880.5	2.9	114.8	854.9	2.6	8.7
1966	109.2	39.9	---	---	421.0	2.7	103.6	418.4	2.4	4.4
1967	246.5	175.1	---	---	633.4	7.0	259.3	665.7	6.2	7.0
1968	186.4	66.9	---	54.9	555.9	4.8	179.8	567.1	4.4	6.0
1969	182.1	30.6	---	107.5	357.6	4.4	167.4	374.6	4.1	3.9
1970	305.4	56.8	---	79.0	452.3	7.2	273.5	469.9	6.6	4.9
1971	262.4	87.0	0.6	102.0	463.5	6.6	250.7	494.1	5.9	5.0
1972	220.2	20.1	1.5	81.2	259.9	5.0	192.4	274.1	4.5	2.8
1973	26.1	4.9	3.4	50.0	41.6	.7	27.7	53.2	.7	.6
1974	66.9	93.5	.9	33.7	393.6	2.4	89.6	414.8	2.2	4.3
1975	26.1	33.3	---	24.5	274.8	.9	35.6	279.3	.9	2.9
1976	114.9	96.9	---	16.5	186.4	3.4	126.3	213.3	2.9	2.1
1977 6/	133.9	87.4	---	9.7	345.5	3.6	139.1	362.4	---	---
1977	134.6	41.6	---	17.4	338.5	3.2	125.5	342.9	2.9	3.3
1978	46.2	12.1	---	17.4	202.5	1.1	43.9	202.1	1.0	2.0

1/ For earlier years see DS-335, May 1971, page 22. 2/ Start of marketing year April 1, 1965-77, October 1, 1977 to present. 3/ Delivery basis after domestic unrestricted sales. Includes purchases of butter, cheese, evaporated milk, and nonfat dry milk under Section 709 and Section 4(a). 4/ Includes butter equivalent of anhydrous milkfat, and PIK purchases. 5/ Includes PIK certificates issued; beginning January 1972, also includes Title I exports originating from private stocks. 6/ April-September transition period.

Dairy product stocks

Item	Sept. 1 1977	Sept. 1 1978	Sept. 1 1979
	Million pounds		
Commercial:			
Butter	56.2	41.7	52.3
American cheese	476.7	399.9	452.7
Other cheese	73.3	72.9	90.5
Nonfat dry milk	109.6	73.9	110.2
Milkfat	235.8	198.3	228.5
Solids-not-fat	306.5	246.0	300.2
Milk equivalent	6,754	5,663	6,499
Government:			
Butter	152.4	242.9	185.0
American cheese	58.0	50.7	3.7
Nonfat dry milk	543.7	626.8	450.1
Milkfat	141.4	211.8	150.1
Solids-not-fat	541.0	618.6	434.1
Milk equivalent	3,721	5,516	3,857

nonfat dry milk by the industry also increased dramatically over a year earlier (by 49 percent) as plants store powder for future needs.

Among other products, industry holdings of dried whey and modified whey products for human food use increased by 50 percent over year-earlier levels as more whey became available with increased cheese production. While dry whole milk powder stocks were down 23 percent, trading stocks were still ample. Manufacturers' holdings of canned milk declined 2 percent from a year ago.

CCC Purchases Light; Butter Sold

Rising wholesale prices for manufactured dairy products during July-September and strong demand for building or holding commercial stocks resulted in very light CCC purchases. Net removals during July-September were slightly above zero on a milk equivalent basis. Even with the increased milk support price effective October 1, CCC purchases should remain small through the rest of the year if wholesale prices strengthen seasonally as expected.

During July and August, CCC sold 3.4 million pounds of butter for unrestricted use. Additional amounts of butter could be sold back to industry if the market price is 5 percent above the new CCC butter purchase price effective October 1. However, this does not appear likely before the year's end. Net removals of American cheese by CCC during July-September were only 8.6 million pounds, less than half of last year's total for the similar period. Evaporated milk removals were about one-fourth less than a year ago. Nonfat dry milk purchases for the July-September period declined 9 percent from a year earlier.

For the marketing year just concluded, CCC removed about 1 percent of the total marketings of milk fat from commercial markets, and about 2 percent of the solids-not-fat (table 9). Milk equivalent removals totalled 1.3 billion pounds, or only 40 percent of the total for the comparable period a year ago. CCC net purchase costs (purchases less proceeds from sales for unrestricted use) were about $230 million for the marketing year, about half of last year's total.

USDA purchases of all dairy products during the 1978-79 marketing year were down substantially from a year ago. The sharpest drop was in cheese purchases, down about 70 percent to 12 million pounds. Net removals of butter were less than half of those made in the last marketing year, while nonfat dry milk purchases declined 40 percent.

USDA dairy purchases[1]

Item	January-September		
	1978	1979	Change
	Million pounds		*Percent*
Butter	122.1	56.3	-53.9
American cheese	39.7	12.1	-69.5
Nonfat dry milk	269.7	187.2	-30.6
Evaporated milk	13.0	12.8	-1.5
Milk equivalent	2,942	1,311	-55.4

[1] Delivery basis, after sales for unrestricted use.

Uncommitted CCC stocks

Item	September 30	
	1978	1979
	Million pounds	
Butter	204.1	147.1
American cheese	30.6	*
Nonfat dry milk	585.1	445.9

*Less than 50,000 pounds.

October 1 CCC inventories of butter not committed to any specific program use were 28 percent less than a year ago, and nonfat dry milk stocks were down by almost a quarter. Inventories of American cheese were zero.

Cheese Consumption Increased in 1978

The general pattern of increased cheese consumption per capita continued in 1978. Civilian consumption of natural cheese, processed cheese, and processed cheese food and spreads rose to 17.2 pounds per person on a natural cheese equivalent basis. Over the past 10 years, per capita cheese consumption has increased by nearly two-thirds (table 10 and figure 11).

Increased commercial use accounted for the bulk of the gain in per capita consumption in 1978. With cheese prices remaining relatively high and CCC purchases small, USDA donations of American

Table 10--Sales and civilian consumption of American and other cheese, United States, selected years, 1950-78

Year	Sales 1/			USDA donations			Civilian consumption	Per capita	
	Civilian	Military	Total	Civilian	Military	Total		Sales	Civilian consumption
	Million pounds							Pounds	
	American cheese								
1950	798	11	809	25	---	25	823	5.4	5.5
1955	782	13	795	88	2	90	870	4.8	5.4
1960	938	7	945	27	1	28	965	5.3	5.4
1965	1,098	8	1,106	80	3	83	1,178	5.7	6.2
1966	1,195	11	1,206	5	---	5	1,200	6.2	6.2
1967	1,168	14	1,182	81	---	81	1,249	6.0	6.4
1968	1,191	13	1,204	105	4	109	1,296	6.0	6.6
1969	1,249	10	1,259	90	1	91	1,339	6.3	6.7
1970	1,385	8	1,393	46	---	46	1,431	6.8	7.1
1971	1,445	7	1,452	75	---	75	1,520	7.0	7.4
1972	1,568	5	1,573	46	---	46	1,614	7.6	7.8
1973	1,657	4	1,661	4	---	4	1,661	7.9	8.0
1974	1,768	3	1,771	43	---	43	1,811	8.4	8.6
1975	1,689	3	1,692	73	---	73	1,762	7.9	8.3
1976	1,908	4	1,912	25	---	25	1,933	8.9	9.1
1977	1,905	7	1,912	117	---	117	2,022	8.8	9.4
1978 2/	2,041	9	2,050	70	---	70	2,111	9.4	9.8
	Other cheese								
1950	332	1	333	---	---	---	332	2.2	2.2
1955	411	1	412	---	---	---	411	2.5	2.5
1960	524	1	525	---	---	---	524	2.9	2.9
1965	648	5	653	---	---	---	648	3.4	3.4
1966	689	7	696	---	---	---	689	3.6	3.6
1967	720	8	728	---	---	---	720	3.7	3.7
1968	787	7	794	---	---	---	787	4.0	4.0
1969	843	6	849	---	---	---	843	4.2	4.2
1970	886	6	892	---	---	---	886	4.4	4.4
1971	966	5	971	---	---	---	966	4.7	4.7
1972	1,105	5	1,110	---	---	---	1,105	5.3	5.4
1973	1,188	5	1,193	---	---	---	1,188	5.7	5.7
1974	1,260	7	1,267	---	---	---	1,260	6.0	6.0
1975	1,310	7	1,317	---	---	---	1,310	6.2	6.2
1976	1,443	3	1,446	---	---	---	1,443	6.7	6.8
1977	1,491	2	1,493	---	---	---	1,491	6.9	6.9
1978 2/	1,625	2	1,627	---	---	---	1,625	7.5	7.5

1/ Domestic disappearance, commercial sources. 2/ Preliminary.

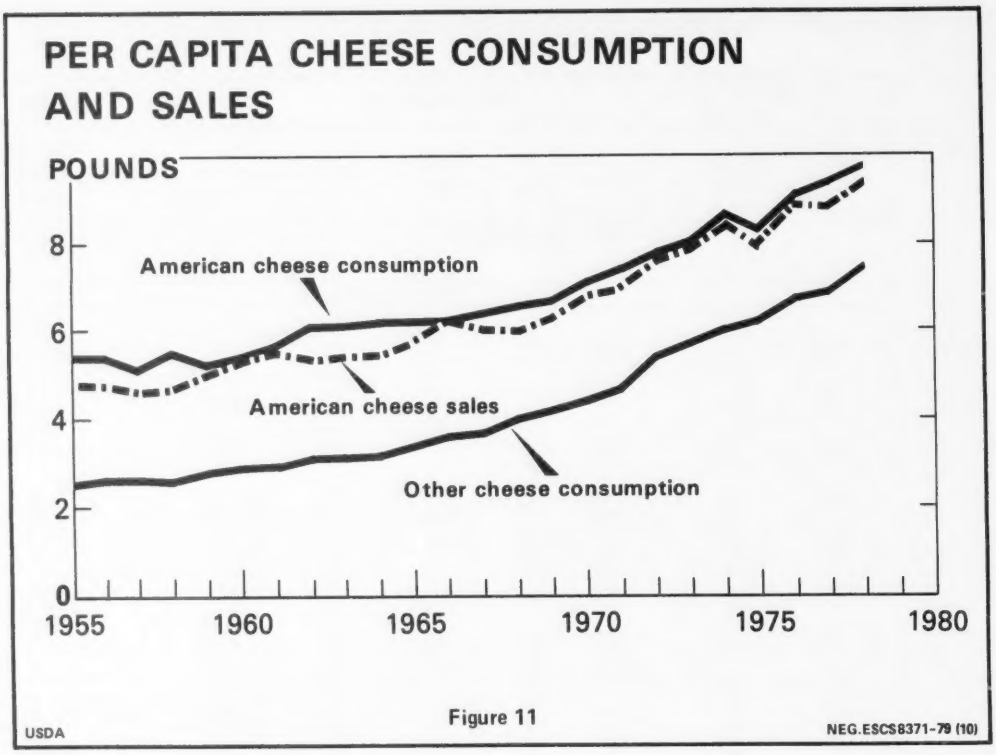

Figure 11

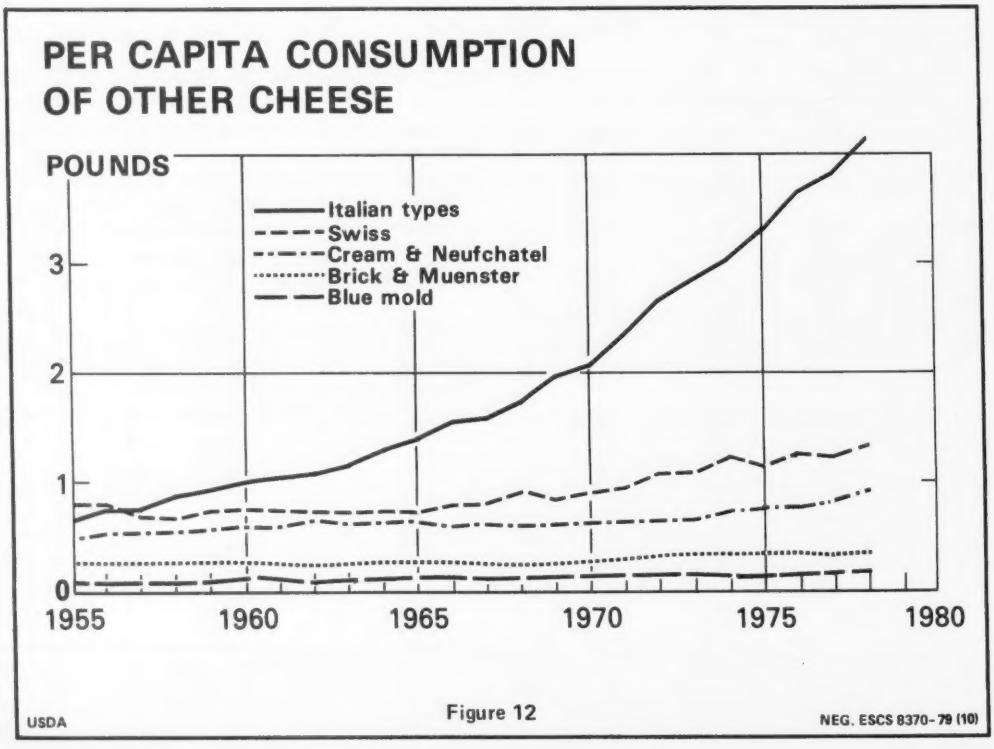

Figure 12

Table 11--Per capita consumption of selected cheese varieties, United States, selected years, 1950-78

Year	Swiss 1/	Italian-types 2/	Brick	Muenster	Cream and Neufchatel	Blue 3/	Edam and Gouda	Limburger	Roquefort
					Pounds				
1950	0.70	0.54	0.20		0.46	0.08	0.04	0.04	0.01
1955	.81	.66	.16	.11	.49	.09	.05	.03	.01
1960	.76	1.00	.15	.13	.60	.11	.06	.02	.01
1961	.73	1.02	.13	.13	.60	.11	.07	.02	.01
1962	.74	1.08	.13	.13	.66	.10	.07	.02	.01
1963	.72	1.18	.13	.13	.62	.10	.07	.02	.01
1964	.74	1.30	.12	.15	.63	.11	.07	.02	.01
1965	.73	1.40	.12	.16	.64	.12	.07	.02	.01
1966	.80	1.53	.12	.15	.60	.13	.10	.02	.01
1967	.81	1.59	.11	.15	.62	.12	.10	.01	.01
1968	.93	1.74	.11	.15	.60	.12	.15	.01	.01
1969	.85	1.97	.10	.16	.62	.13	.10	.01	.01
1970	.90	2.09	.10	.17	.63	.14	.11	.01	.01
1971	.95	2.34	.11	.20	.64	.15	.10	.01	.01
1972	1.08	2.65	.11	.22	.65	.16	.11	.01	.01
1973	1.08	2.86	.11	.22	.67	.17	.12	.01	.01
1974	1.21	3.02	.11	.23	.72	.16	.11	.01	.01
1975	1.12	3.31	.09	.25	.76	.16	.11	.01	.01
1976	1.28	3.65	.09	.26	.79	.18	.11	.01	.01
1977	1.24	3.82	.07	.26	.82	.18	.11	.01	.01
1978	1.37	4.18	.08	.27	.92	.19	.12	.01	.01

1/ Includes imports of Gruyere and Emmenthaler. 2/ Includes imports of Romano, Pecorino, Reggiano, Parmesano, Provolone, and Provelette. 3/ Includes Gorgonzola.

Table 12--Per capita consumption of Italian-type cheese, by variety, United States, selected years, 1964, 1972-1978

Variety	1964	1972	1973	1974	1975	1976	1977	1978
				Pounds				
Provolone	.17	.24	.27	.28	.28	.32	.35	.37
Romano	.16	.17	.16	.15	.23	.17	.16	.20
Parmesan	.15	.23	.19	.26	.18	.28	.27	.29
Mozzarella	.60	1.60	1.80	1.90	2.16	2.37	2.53	2.77
Ricotta	.18	.32	.35	.34	.38	.42	.42	.45
Other	.03	.08	.09	.09	.08	.08	.09	.11

cheese decreased and did not contribute to the gain in per person consumption. Higher meat prices along with such continuing trends as increasing fast-food sales, fewer full meals, and greater awareness of the varieties and nutritive value of cheese all contributed to the increased per capita consumption.

Per capita consumption of American cheese during 1978 increased 4 percent to 9.8 pounds, all from increased commercial use. Mozzarella consumption continued to rise steadily in 1978, accounting for two-thirds of the gain in per capita consumption of Italian type cheeses. Per capita consumption of other types of Italian cheese all showed small increases (table 12).

Per capita consumption of Swiss cheese and Cream and Neufchatel cheeses increased by 10 and 12 percent, respectively, from 1977. Other varieties, such as Brick, Munster, Edam and Gouda, showed little or no increase in per person usage in 1978 (table 11).

More than three-fourths of the 1978 increase occurred in use of natural cheese, which is consistent with the long-run trend, and contrasts with 1977 when processed foods and spreads accounted for about half the increase. Processed cheese use rebounded from the 1977 decrease, and processed foods and spreads consumption matched the record level of 1975 (table 13 and figure 13).

Estimated per capita civilian consumption of Cheddar and other American cheese, United States, 1950-78

Year	Cheddar	Other American[1]	Total American types
	Pounds		
1950	5.2	0.3	5.5
1955	4.9	.5	5.4
1960	4.8	.6	5.4
1965	5.3	.9	6.2
1966	5.0	1.2	6.2
1967	5.2	1.2	6.4
1968	5.4	1.2	6.6
1969	5.7	1.1	6.7
1970	5.9	1.2	7.1
1971	6.0	1.4	7.4
1972	6.1	1.7	7.8
1973	6.2	1.8	8.0
1974	6.4	2.2	8.6
1975	6.1	2.2	8.3
1976	6.6	2.5	9.1
1977	6.9	2.5	9.4
1978	7.1	2.6	9.7

[1] Colby, washed or stirred curd, high and low moisture jack, Monterey and granular.

FOREIGN DAIRY TRADE AND TRENDS

Cheese Imports Steady

Cheese imports increased by about 8 percent in July-August over a year earlier. However, for the first 8 months of 1979, total cheese imports were down slightly from a year earlier as the increase in quota types was outweighed by lower imports of non-quota types (table 14).

Among other dairy products subject to quotas, butteroil and nonfat dry milk were the only dairy products whose calendar year quotas were filled or came close to being filled as of September 1. With respect to nonquota products, July-August casein imports rose 13 percent from a year earlier, with July imports up 29 percent while August imports dropped under the year-earlier level by 2 percent.

Table 13—Estimated per capita civilian consumption of processed and natural cheese, United States, selected years, 1956-78

Year	Processed	Processed foods and spreads[1]	Total processed and products[2]	Natural[3]	Total natural equivalent
			Pounds		
1956	2.2	1.1	3.3	5.4	8.0
1960	2.5	1.3	3.8	5.3	8.4
1965	3.2	1.2	4.4	5.9	9.5
1970	3.3	2.3	5.6	7.1	11.5
1971	3.6	2.3	5.9	7.5	12.1
1972	3.4	2.7	6.1	8.3	13.2
1973	3.3	2.7	6.1	8.9	13.7
1974	3.5	3.0	6.4	9.6	14.6
1975	3.3	3.4	6.7	9.3	14.5
1976	3.9	2.7	6.5	10.6	15.9
1977	3.6	3.3	6.9	10.9	16.3
1978	3.8	3.4	7.3	11.6	17.2

[1] Includes cold pack; excludes spreads from Neufchatel and cream cheese. [2] May not add due to rounding. [3] Consumed in this form.

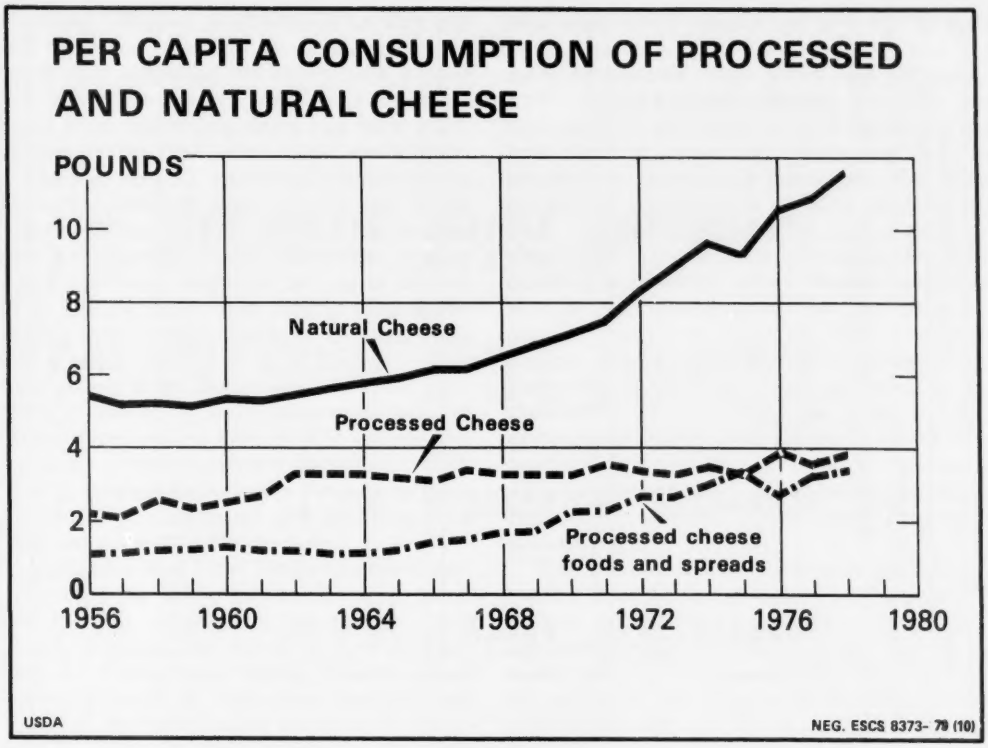

Figure 13

For the year thus far, casein imports were 8 percent more than in 1978. Lactose imports nearly tripled for July-August but were down by over a half for the first 8 months of 1979.

July-August imports of all dairy products on a milk equivalent, fat solids basis rose 9 percent from last year. For the first 8 months of 1979, though, total imports were down 3 percent. Because of continuing higher domestic dairy product prices (especially cheese) and the existence of much room under the quotas for most covered products, total imports should be equal or be slightly above for this calendar year compared to 1978.

January-August commercial exports lagged behind a year earlier, although condensed bulk milk, lactose, butter, and American cheese exports were up. U.S. dairy products continue to be at a competitive disadvantage relative to the subsidized products from the European Community and Oceania. Food-aid shipments of nonfat dry milk and corn-soy-milk mixture decreased significantly from last year for the first eight months of 1979.

U.S. dairy trade
(milk equivalent)

Year and quarters	Imports		Exports	Shipments[1]
	Cheese	Other		
	Million pounds			
1978				
1st	379	157	87	168
2nd	337	51	105	156
3rd	484	24	85	145
4th	799	72	91	133
Year[2]	1,999	307	368	602
1979				
1st	251	133	98	150
2nd	432	39	89	167
July-Aug.	346	23	N.A.	N.A.

[1] To U.S. territories. [2] May not add due to rounding.
N.A. = not available.

World Milk Production Still Rising

Increased milk production in the European Community (EC), the United States, and Oceania is expected to outweigh a substantial decline in production in the Soviet Union. This will result in slightly higher world milk production in 1979 than in 1978.

European Community (EC) milk production from January 1 to August 1 was up over 2 percent from last year for the comparable period. For the year, EC production is expected to be about 1½ percent larger. Despite downward pressure on

Table 14--Dairy Products: U.S. imports, quota and non-quota, total 1978, and January-August, 1978-79 1/

Product	Calendar year quota	1978 imports	August			Cumulative, January-August		
			1978	1979	1979 as a % of 1978	1978	1979	1979 as a % of 1978
	Thousand pounds				Percent	Thousand pounds		Percent
Cheese, quota types								
American-Cheddar	10,037.5	10,748	545	793	146	5,162	4,689	91
-Other	6,096.6	7,037	2,554	174	7	3,758	2,228	59
Italian-Original loaves	11,500.1	8,994	655	399	61	5,453	3,836	70
-Other	1,494.0	1,317	155	149	96	818	583	71
Edam and Gouda-Natural	9,200.4	8,601	581	499	86	4,048	3,818	94
-Processed	3,151.0	3,079	260	193	74	695	366	53
Blue Mold	5,017.0	5,505	299	465	156	3,045	1,953	64
Swiss-Emmenthaler 2/	20,420.0	14,032	1,527	2,897	190	5,882	11,675	198
-Gruyere-process 2/	11,242.0	10,607	922	1,145	124	4,588	4,413	96
Other-Over 0.5% fat 2/	40,730.0	38,374	5,200	3,708	71	11,173	18,866	169
-Under 0.5% fat 2/	8,901.0	2,457	160	188	118	371	508	137
Total	127,789.6	110,752	12,857	10,609	83	44,994	52,935	118
Cheese, non-quota types								
Swiss-Emmenthaler		59,647	4,660	4,486	96	37,506	30,589	82
-Gruyere-process		8,329	728	1,012	139	5,501	4,165	76
Other		39,899	2,842	4,036	142	22,867	24,538	107
Pecorino		20,288	1,044	1,976	189	11,669	10,435	89
Roquefort		1,471	69	163	236	907	909	100
Other 3/		1,800	455	78	17	1,257	714	57
Total		131,434	9,798	11,751	120	79,707	71,350	90
Other quota products								
Butter	707.0	736	50	105	210	418	413	99
Butteroil	1,200.0	1,200	--	--	--	1,200	1,200	100
Butterfat mixtures	2,580.0	4/2,757	229	405	177	1,627	1,269	78
Ice cream	3,377.3	4/4,360	--	--	--	2,166	1,911	88
Frozen cream	12,540.0	4/14,586	150	596	397	11,120	9,486	85
Nonfat dry milk	1,807.0	4/2,388	287	179	62	1,745	1,806	103
Dried buttermilk	496.0	478	40	--	--	202	--	--
Evaporated milk	1,312.0	--	--	1	--	--	1	--
Condensed milk	4,079.0	887	--	35	--	431	245	57
Chocolate crumb-Regular	17,000.0	8,686	707	794	112	4,985	5,460	110
-Lowfat	4,680.0	1,546	80	200	250	920	1,431	156
Animal feed with milk solids	16,300.0	14,647	4,689	2,911	62	10,784	10,898	101
Non-quota products								
Casein		137,134	11,987	11,770	98	96,988	105,050	108
Lactose		3,112	134	450	336	2,743	1,296	47
Milk equivalent, fat solids basis total all products	1,305,620	2,305,258	195,713	201,002	103	1,261,105	1,224,725	97

1/ Preliminary. 2/ Subject to quota if f.o.b. price is less than "pricebreak" (7 cents above the American cheese support purchase price, rounded to nearest whole cent--$1.23 effective April 13, 1979. 3/ Gjetost, Bryndza, Gammelost and Noekkelost, and Goya. 4/ Probable error in reported data.

cheese prices, cheese production in the EC increased 4 percent over the January-July period from a year ago, reflecting the heavy milk supply situation. But cheese stocks were generally lower as demand from other countries has been high. Butter output for the first seven months of 1979 in the EC was up, and EC intervention stocks on August 1 were one-fourth above a year ago. While nonfat dry milk production declined for the first half of the year, increased sales to nations outside the EC and continued subsidies for use in animal feed within the EC have been largely responsible for reducing intervention stocks to less than half those held a year earlier.

Among other West European nations, milk production increased at levels similar to those in EC countries over the first half of 1979. Cheese and butter output correspondingly increased. Milk production in Eastern Europe was down from year-earlier levels, despite increased cow numbers, as a shortage of animal feedstuffs remained.

Both Australia and New Zealand posted substantial gains in milk production in their respective dairying years just concluded. A severe drought last autumn and winter in New Zealand was offset by a favorable spring. Cheese output increased dramatically in both countries while butter production declined during the 1978/79 dairying season in Australia while it increased in New Zealand.

Canadian milk production continued to fluctuate around year-earlier levels. Cheese manufacture in Canada was sharply expanded, while butter output declined. Japan, which has become an important milk producer, continued to increase milk production above a year ago. Most of the gain probably can be attributed to increased cow numbers and rising output per cow due to increased feeding as the high value of the Japanese Yen has made concentrate ration prices very favorable.

Worldwide surpluses of milk and milk products still persist, primarily due to improved genetics and feeding practices. This has resulted in production increasing faster than the worldwide growth in consumption of dairy products. In general, countries with supported dairy economies outside the EC have had modest success in slowing or curbing production gains. Several countries have done so by imposing quotas and penalties for over-quota production. Austrian deliveries were cut sharply over the first half of 1979 under the policy. Norway has paid bonuses to producers to cut back production, while in Australia, policy was aimed at decreasing butter production in favor of cheese production to reduce dairy product stocks. Japan, with its dramatic milk production gains of the last few years, is now facing the milk oversupply situation.

The EC offered incentives to producers to not market milk or to convert to beef production as a means of checking production, but the program has had less impact than expected. For the 1980/81 dairy year, the co-responsibility levy will remain at 0.5 percent of the target price for milk, unless milk production increases by more than 2 percent over the previous year. In that event, the co-responsibility levy will be increased to 1.0 percent except for those producers whose production did not increase. In addition, a proposal is now under consideration to reduce production by linking the co-responsibility levy on producers to the level of all EC milk deliveries while exemptions from the tax would be given to farmers who produce milk using grass and farm-grown feeds.

Table 15.--U.S. Dairy Situation at a Glance

Item	Unit or base period	1977	1978					1979		
		Aug.	June	July	Aug.	Sept.	Year	June	July	Aug.
Production and cow numbers:										
Total milk	Mil. lb.	10,363	10,851	10,534	10,213	9,733	121,928	10,982	10,705	10,400
Milk per cow	Lb.	945	1,004	974	944	899	11,240	1,023	997	968
Number of milk cows	Thou.	10,968	10,808	10,811	10,821	10,832	10,848	10,735	10,738	10,740
Prices received by farmers:										
All milk, sold to plants, 100 pounds	Dol.	9.66	10.00	10.10	10.50	10.90	10.58	11.50	11.60	12.00
Percentage of parity 1/	Pct.	.78	.76	.75	.75	.74	.75	.75	.75	.75
Manufacturing grade milk, 100 pounds	Dol.	8.64	9.24	9.28	9.62	9.96	9.65	10.80	10.80	11.10
Parity equivalent	Dol.	10.93	12.16	12.16	12.16	12.33	12.09	14.18	14.18	14.18
Fat content	Pct.	3.54	3.55	3.54	3.54	3.63	3.67	3.56	3.52	3.54
Minnesota-Wisconsin (3.5% fat), 100 pounds	Dol.	8.64	9.26	9.33	9.68	9.90	9.57	10.76	10.87	11.09
Milk eligible for fluid market, 100 pounds	Dol.	9.91	10.20	10.30	10.70	11.00	10.80	11.70	11.80	12.20
Price ratios and dairy ration values:										
Milk-feed 2/	Lb.	1.46	1.43	1.45	1.54	1.59	1.53	1.51	1.43	1.50
Manufacturing grade milk-hog	Lb.	.20	.19	.20	.20	.21	.21	.27	.28	.31
Manufacturing grade milk-beef cattle	Lb.	.25	.18	.18	.19	.19	.20	.16	.16	.18
Value of concentrate ration fed milk cows	Dol.	5.84	6.23	6.13	5.93	5.96	6.07	---	6.69	---
Farm cash receipts from dairy products	Mil. dol.	991	1,070	1,047	1,049	1,044	12,722	1,235	1,221	1,221
Production of factory products:										
Butter	Mil. lb.	77.8	85.1	71.4	63.2	64.0	994.3	84.7	74.8	64.9
American cheese, whole milk	Mil. lb.	165.0	208.0	179.6	165.6	146.4	2,074.2	210.9	195.2	181.8
Cheese, other than American	Mil. lb.	110.7	123.9	114.1	120.9	118.6	1,445.1	133.8	123.8	129.1
Canned milk, unskimmed	Mil. lb.	73.4	81.3	74.3	69.0	59.0	787.9	80.2	70.7	66.7
Dry whole milk	Mil. lb.	6.5	7.2	6.1	5.7	4.7	74.6	7.6	7.2	6.9
Frozen products 3/	Mil. gal.	123.6	127.6	120.1	124.3	101.8	1,170.4	119.3	118.0	123.8
Creamed cottage cheese	Mil. lb.	77.2	77.2	73.7	76.8	72.4	872.3	74.1	71.3	73.3
Total whole milk equivalent 4/	Mil. lb.	5,635	6,306	5,586	5,314	4,769	64,748	6,290	5,874	5,549
Nonfat dry milk, human use	Mil. lb.	106.0	114.9	97.2	75.7	57.5	920.4	112.2	94.5	78.7
Wholesale prices:										
Butter, Grade A, Chicago	Ct.	100.7	106.7	107.9	116.7	115.8	109.8	121.8	122.7	128.7
Cheese, American (40-pound blocks), f.o.b. Wisconsin assembling points, pound	Ct.	97.1	102.6	102.9	109.1	110.8	107.1	121.8	123.7	128.5
Evaporated milk, case	Dol.	15.25	16.26	16.26	16.26	16.26	16.20	17.89	17.90	17.97
Dry whole milk, pound	Ct.	82.5	87.1	88.1	90.7	92.6	89.8	99.2	101.2	103.3
Nonfat dry milk, pound	Ct.	68.1	71.0	71.3	71.5	72.5	71.4	79.5	79.7	80.1
Dairy products (BLS)	1967=100	175.3	185.4	186.1	190.8	192.9	188.4	208.3	209.0	215.2
Retail prices (BLS):										
Consumer price index 5/	1967=100	183.3	195.3	196.7	197.7	199.3	195.4	216.6	218.9	221.1
All food 5/	1967=100	195.2	213.8	215.0	215.4	215.6	211.4	235.4	236.9	236.3
All dairy products 5/	1967=100	175.1	184.8	185.3	186.1	188.8	185.6	205.5	206.3	208.6
Fluid milk and cream	12/77=100	---	104.6	104.8	105.1	106.5	104.8	115.7	116.1	117.7
Whole milk	1967=100	162.9	171.4	171.7	172.1	174.2	171.7	189.4	190.0	192.8
Other	12/77=100	---	104.2	104.5	105.1	106.6	104.5	115.6	116.3	117.4
Manufactured dairy products	12/77=100	---	104.3	104.7	105.3	107.0	105.0	116.8	117.3	118.2
Butter	1967=100	164.4	175.8	176.5	180.7	187.0	179.4	199.9	200.6	203.0
Cheese	12/77=100	---	104.0	104.4	104.8	106.7	104.8	116.9	117.7	118.4
Frozen desserts	12/77=100	---	104.9	104.8	105.5	106.4	104.7	116.9	117.0	117.8
Other	12/77=100	---	103.8	105.0	105.1	105.4	104.4	114.5	114.5	115.4
Margarine	1967=100	218.5	230.1	231.8	230.9	231.9	226.1	239.1	240.2	240.3
Stocks, end of month:										
Creamery butter	Mil. lb.	208.6	282.0	297.7	284.6	266.7	---	260.1	257.3	237.2
Cheese, total 5/	Mil. lb.	608.0	520.9	523.6	523.5	512.8	---	520.2	555.6	546.8
Canned milk, unskimmed	Mil. lb.	158.8	101.5	120.2	134.4	136.0	---	117.1	134.9	131.9
Dry whole milk	Mil. lb.	6.5	9.5	9.4	9.3	7.4	---	8.6	8.2	7.2
Total whole milk equivalent 7/	Mil. lb.	10,475	11,018	11,492	11,179	10,672	---	10,515	10,868	10,356
Nonfat dry milk	Mil. lb.	653.4	701.9	713.5	700.7	681.0	---	538.3	558.8	560.3
Commercial disappearance:										
Creamery butter	Mil. lb.	72.8	77.5	68.7	69.8	83.8	903.5	69.5	74.6	71.6
Cheese, American	Mil. lb.	151.1	164.3	166.4	167.4	163.9	2,064.7	195.2	156.1	190.3
Cheese, other than American	Mil. lb.	127.8	128.8	131.7	143.1	130.7	1,655.1	145.7	139.2	151.4
Canned milk, unskimmed	Mil. lb.	45.3	58.2	53.6	53.3	56.7	776.1	52.3	51.6	68.5
Milk in all products	Mil. lb.	9,980	10,062	10,305	10,213	10,228	119,227	10,388	10,164	10,619
Nonfat dry milk	Mil. lb.	56.4	53.3	51.4	78.2	60.7	658.4	44.6	58.3	76.9
USDA net removals:										
Butter	Mil. lb.	13.3	20.6	9/	-6.0	-6.3	112.0	8.2	-1.0	-2.4
Cheddar cheese	Mil. lb.	24.0	13.6	13.6	3.5	---	39.7	2.2	8.3	.3
Nonfat dry milk	Mil. lb.	62.7	54.0	46.3	18.8	7.7	285.0	49.8	41.4	15.0
Evaporated milk	Mil. lb.	2.7	1.1	1.9	1.5	1.1	17.6	1.1	1.5	1.2
Total whole milk equivalent	Mil. lb.	518	562	138	-86	-127	2,743	194	65	-44
Fluid sales, change from year earlier: 8/										
Whole milk	Pct.	-2.3	-2.1	-2.4	-2.9	-3.3	-2.2	-.9	-2.2	NA
Low-fat and skim milk	Pct.	+7.1	+1.9	+3.0	+3.4	+3.1	+4.8	+3.6	+3.8	NA
Total fluid milk	Pct.	+1.0	-.5	-.5	-.7	-.9	+.2	+.9	+.1	NA
Cream and cream mixtures	Pct.	+3.0	-2.6	-2.9	-4.8	-5.2	-1.5	0	NA	NA

1/ Seasonally adjusted prices as percentage of parity price.
2/ Different series that formerly published.
3/ Ice cream, ice milk, and sherbert.
4/ Includes manufactured products for which current monthly series are available.
5/ For all urban consumers starting January 1978.
6/ Natural, plus process American cheese held by CCC.
7/ Excludes cream and bulk condensed milk.
8/ Daily average sales in Federal and State Marketings areas.
9/ Less than 50,000 pounds.

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